



In response to the Office Action of August 10, 2005, please amend the application as follows:

**IN THE CLAIMS**

1-49. (Cancelled)

Please add new claims 50-70 as follows.

50. (New) A process for the preparation of inactivated microorganisms containing one or more pharmacological or nutritional substances soluble in an aqueous solution comprising the following steps:

i) drawing out the endocellular mass of a microorganism by means of a hypertonic treatment;

ii) separating the endocellular mass and recovering the empty microorganisms; and

iii) loading one or more pharmacological or nutritional substances soluble in an aqueous solution into the inactivated microorganism recovered in step ii) by incubating said empty microorganism in a hypotonic aqueous solution, iso-tonic aqueous solution, or a mixture thereof, comprising the pharmacological or nutritional substances.

51. (New) The process according to claim 50, comprising a further step of chemical or physical inactivation of the microorganism obtained in step ii), leaving the external membrane of the microorganism unaltered.

52. (New) The process according to claim 50, wherein the suitable microorganism in step i) is *Saccharomyces cerevisiae*.

53. (New) The process according to claim 50, wherein said pharmacological substance is selected from the group consisting of antibiotics, anti-inflammatories, antibacterials, antivirals, antifungals, antiparasitic agents and vaccines.

54. (New) The process according to claim 53, wherein said antibiotic is oxytetracycline.
55. (New) The process according to claim 53, wherein said antibacterial is sulphadimethoxin.
56. (New) The process according to claim 50, wherein said nutritional substance is selected from the group consisting of sodium quercetin, catechin, isocatechin, aliphatic polyalcohols, polyphenols, flavans, cyanins, resveratrol and hyperic acid.
57. (New) The process according to claim 50, wherein said nutritional substance is selected from the group consisting of cyanocobalamin (vitamin B12), folic acid, thiamine (Vitamin B1),  $\alpha$ -tocopherol and ascorbic acid.
58. (New) The process according to claim 50, wherein:
- in step i) the endocellular mass is drawn out by incubating the microorganism in a hypertonic solution of the same pharmacologically active substance to be loaded into the microorganism; and
- in step iii) said pharmacologically active substance is already present in the solution and is loaded into the microorganism with a change of the osmolarity due to dilution of the solution to hypo-tonicity, iso-tonicity, or a mixture thereof.
59. (New) The process according to claim 50, further comprising a treatment of the microorganisms with a fixative or a disinfecting agent.
60. (New) The process according to claim 50, wherein the hypertonic treatment in step i) is obtained by incubation of a hypertonic solution comprising NaCl in concentrations higher than 0.2 M.
61. (New) The process according to claim 50, wherein said hypotonic treatment in step iii) is obtained by means of a hypotonic solution comprising NaCl in concentrations lower than 0.12M.

62. (New) The process according to claim 50, wherein the isotonic treatment in step iii) is performed by a 0.9% NaCl isotonic solution, optionally comprising sodium citrate 0.025 M.
63. (New) The process according to claim 62, wherein the 0.9% isotonic solution comprises sodium citrate 0.025 M.
64. (New) The process according to claim 50, wherein
- said hypertonic treatment in step i) is performed with a solution consisting of 1.0 M NaCl and 0.05 M sodium citrate;
  - said hypotonic treatment in step iii) is performed with a solution consisting of 0.05 M NaCl and 0.005 M sodium citrate.
65. (New) The process according to claim 50, wherein
- said hypertonic treatment in step i) is performed with a solution consisting of 1.0 M NaCl and 0.05 M sodium citrate;
  - said isotonic treatment in step iii) is performed with a solution consisting of 0.9% NaCl and 0.025 M sodium citrate.
66. (New) A microorganism obtainable according to the process of claim 53.
67. (New) A microorganism obtainable according to the process of claim 54.
68. (New) A microorganism obtainable according to the process of claim 55.
69. (New) A microorganism obtainable according to the process of claim 56.
70. (New) A microorganism obtainable according to the process of claim 57.